

NOTICE OF DRAFTSPERSON'S  
PATENT DRAWING REVIEWThe drawing(s) filed (insert date) 7-12-01 are:

A.  approved by the Draftsperson under 37 CFR 1.84 or 1.152.  
 B.  objected to by the Draftsperson under 37 CFR 1.84 or 1.152 for the reasons indicated below. The Examiner will require submission of new, corrected drawings when necessary. Corrected drawing must be submitted according to the instructions on the back of this notice.

1. DRAWINGS. 37 CFR 1.84(a): Acceptable categories of drawings:  
 Black ink. Color.  
 Color drawings are not acceptable until petition is granted.  
 Fig(s) \_\_\_\_\_
2. PHOTOGRAPHS. 37 CFR 1.84(b)  
 1 full-tone set is required. Fig(s) \_\_\_\_\_  
 Photographs may not be mounted. 37 CFR 1.84(e)  
 Poor quality (half-tone). Fig(s) 104, 105, 19-22
3. TYPE OF PAPER. 37 CFR 1.84(e)  
 Paper not flexible, strong, white, and durable.  
 Fig(s) \_\_\_\_\_  
 Erasures, alterations, overwritings, interlineations, folds, copy machine marks not accepted. Fig(s) \_\_\_\_\_  
 Mylar, vellum paper is not acceptable (too thin). Fig(s) \_\_\_\_\_
4. SIZE OF PAPER. 37 CFR 1.84(f): Acceptable sizes:  
 21.0 cm by 29.7 cm (DIN size A4)  
 21.6 cm by 27.9 cm (8 1/2 x 11 inches)  
 All drawing sheets not the same size.  
 Sheet(s) \_\_\_\_\_  
 Drawings sheets not an acceptable size. Fig(s) \_\_\_\_\_
5. MARGINS. 37 CFR 1.84(g): Acceptable margins:  
 Top 2.5 cm Left 2.5cm Right 1.5 cm Bottom 1.0 cm  
 SIZE: A4 Size  
 Top 2.5 cm Left 2.5 cm Right 1.5 cm Bottom 1.0 cm  
 SIZE: 8 1/2 x 11  
 Margins not acceptable. Fig(s) 2, 3, 5-8, 15, 18  
 Top (T) Left (L) Right (R) Bottom (B)
6. VIEWS. 37 CFR 1.84(h)  
 REMINDER: Specification may require revision to correspond to drawing changes.  
 Partial views. 37 CFR 1.84(h)(2)  
 Brackets needed to show figure as one entity.  
 Fig(s) \_\_\_\_\_  
 Views not labeled separately or properly.  
 Fig(s) 8, 9  
 Enlarged view not labeled separately or properly.  
 Fig(s) \_\_\_\_\_
7. SECTIONAL VIEWS. 37 CFR 1.84 (h)(3)  
 Hatching not indicated for sectional portions of an object.  
 Fig(s) \_\_\_\_\_  
 Sectional designation should be noted with Arabic or Roman numbers. Fig(s) \_\_\_\_\_
8. ARRANGEMENT OF VIEWS. 37 CFR 1.84(i)  
 Words do not appear on a horizontal, left-to-right fashion when page is either upright or turned so that the top becomes the right side, except for graphs. Fig(s) \_\_\_\_\_
9. SCALE. 37 CFR 1.84(k)  
 Scale not large enough to show mechanism without crowding when drawing is reduced in size to two-thirds in reproduction.  
 Fig(s) \_\_\_\_\_
10. CHARACTER OF LINES, NUMBERS, & LETTERS:  
 37 CFR 1.84(l)  
 Lines numbers & letters not uniformly thick and well defined, clean, durable, and black (poor line quality).  
 Fig(s) 11, 13, 16
11. SHADING. 37 CFR 1.84(m)  
 Solid black areas pale. Fig(s) \_\_\_\_\_  
 Solid black shading not permitted. Fig(s) 12, 16, 18  
 Shade lines, pale, rough and blurred. Fig(s) \_\_\_\_\_
12. NUMBERS, LETTERS, & REFERENCE CHARACTERS:  
 37 CFR 1.84(p)  
 Numbers and reference characters not plain and legible.  
 Fig(s) 9, 11  
 Figure legends are poor. Fig(s) 11  
 Numbers and reference characters not oriented in the same direction as the view. 37 CFR 1.84(p)(1)  
 Fig(s) \_\_\_\_\_  
 English alphabet not used. 37 CFR 1.84(p)(2)  
 Figs \_\_\_\_\_  
 Numbers, letters and reference characters must be at least .32 cm (1/8 inch) in height. 37 CFR 1.84(p)(3)  
 Fig(s) \_\_\_\_\_
13. LEAD LINES. 37 CFR 1.84(q)  
 Lead lines cross each other. Fig(s) \_\_\_\_\_  
 Lead lines missing. Fig(s) \_\_\_\_\_
14. NUMBERING OF SHEETS OF DRAWINGS. 37 CFR 1.84(i)  
 Sheets not numbered consecutively, and in Arabic numerals beginning with number 1. Sheet(s) \_\_\_\_\_
15. NUMBERING OF VIEWS. 37 CFR 1.84(u)  
 Views not numbered consecutively, and in Arabic numerals, beginning with number 1. Fig(s) \_\_\_\_\_
16. CORRECTIONS. 37 CFR 1.84(w)  
 Corrections not made from prior PTO-948 dated \_\_\_\_\_
17. DESIGN DRAWINGS. 37 CFR 1.152  
 Surface shading shown not appropriate. Fig(s) \_\_\_\_\_  
 Solid black shading not used for color contrast.  
 Fig(s) \_\_\_\_\_

## COMMENTS

REVIEWER J. Chase DATE 12-3-02 TELEPHONE NO. 703 305 8450

ATTACHMENT TO PAPER NO. \_\_\_\_\_